

CLAIMS

1. A polymorphic database comprising:  
an application program; and  
data accessible by the application program and on  
5 which the application program is operative, wherein the  
data comprises:

a records data set (RDS) containing at least one  
RDS entry having data fields configured for  
representing data; and

10 a categories data set (CDS) containing at least  
one CDS entry configured for being associated with the  
at least one RDS entry and having at least one data  
type field sufficient to describe the type of data  
contained by the at least one associated RDS entry.

15 2. The database of Claim 1 further comprising for  
each CDS entry a unique category identifier, and for each  
RDS entry a field for storing the unique category  
identifier of the CDS entry with which a respective RDS  
entry is associated.

20 3. The database of Claim 1 further comprising for  
each RDS entry a unique record identifier, and a field  
configured for storing the unique record identifier of each  
other RDS entry with which each respective RDS entry is  
associated.

4. The database of Claim 1 further comprising for each CDS entry a unique category identifier and an inheritance field configured for storing the unique category identifier corresponding to another CDS entry from which properties will be inherited for a respective CDS entry.

5. The database of Claim 1 further comprising for each CDS entry a unique category identifier and an inheritance field configured for storing the unique category identifier corresponding to another CDS entry from which properties will be cumulatively inherited for a respective CDS entry.

6. The database of Claim 1 further comprising:  
for each CDS entry a unique category identifier;  
for each CDS entry a field configured for storing the unique category identifier of each other CDS entry with which each respective CDS entry is associated;  
for each RDS entry a unique record identifier; and  
for each RDS entry a RECORD\_CATEGORY\_ID field configured for storing the unique category identifier corresponding to the RDS entry, and a PEERS field for storing the unique record identifier of each other RDS entry which corresponds to each respective CDS entry associated with the unique category identifier stored in the RECORD\_CATEGORY\_ID field.

7. The database of Claim 1 further comprising:

for each CDS entry a unique category identifier;  
for each CDS entry a field configured for storing the  
unique category identifier of each other CDS entry with  
which each respective CDS entry is associated;

5       for each RDS entry a unique record identifier;  
for each RDS entry a RECORD\_CATEGORY\_ID field  
configured for storing the unique category identifier  
corresponding to the RDS entry, and a PEERS field for  
storing the unique record identifier of each other RDS  
10 entry which corresponds to each respective CDS entry  
associated with the unique category identifier stored in  
the RECORD\_CATEGORY\_ID field; and

for each CDS entry a field configured for storing a  
STAND-ALONE flag indicating whether a PEER field must be  
15 available in a first RDS entry to store the unique record  
identifier of a second RDS entry before said second RDS  
entry may be entered into the RDS.

8. The database of Claim 1 further comprising  
for each CDS entry a unique category identifier;  
20 for each CDS entry a field configured for storing the  
unique category identifier of each other CDS entry with  
which each respective CDS entry is associated;

for each RDS entry a unique record identifier;  
for each RDS entry a RECORD\_CATEGORY\_ID field  
25 configured for storing the unique category identifier  
corresponding to the RDS entry, and a PEERS field for  
storing the unique record identifier of each other RDS

entry which corresponds to each respective CDS entry associated with the unique category identifier stored in the RECORD\_CATEGORY\_ID field; and

for each CDS entry a field configured for storing a  
5 REUSABLE flag indicating whether a new other RDS entry should be created and referenced in the PEERS field, or an existing other RDS entry may be referenced in the PEERS field if the value and meaning of the existing other RDS entry is substantively identical to the value of the new  
10 other RDS entry that would otherwise have been created.

9. A method for defining data/type associations, the method comprising the steps of:

defining an application program; and

defining data accessible by the application program  
15 and on which the application program is operative, wherein the data comprises:

a records data set (RDS) containing at least one RDS entry having data fields configured for representing data; and

20 a categories data set (CDS) containing at least one CDS entry configured for being associated with the at least one RDS entry and having at least one data type field sufficient to describe the type of data contained by the at least one associated RDS entry.

10. The method of Claim 9 further comprising the steps of defining for each CDS entry a unique category identifier, and defining for each RDS entry a field for storing the unique category identifier of the CDS entry  
5 with which a respective RDS entry is associated.

11. The method of Claim 9 further comprising the steps of defining for each RDS entry a unique record identifier, and defining a field configured for storing the unique record identifier of each other RDS entry with which  
10 each respective RDS entry is associated.

12. The method of Claim 9 further comprising the step of defining for each CDS entry a unique category identifier and an inheritance field configured for storing the unique category identifier corresponding to another CDS entry from  
15 which properties will be inherited for a respective CDS entry.

13. The method of Claim 9 further comprising the step of defining for each CDS entry a unique category identifier and an inheritance field configured for storing the unique  
20 category identifier corresponding to another CDS entry from which properties will be cumulatively inherited for a respective CDS entry.

14. The method of Claim 9 further comprising the steps of:

defining for each CDS entry a unique category identifier;

defining for each CDS entry a field configured for storing the unique category identifier of each other CDS entry with which each respective CDS entry is associated;

defining for each RDS entry a unique record identifier; and

defining for each RDS entry a RECORD\_CATEGORY\_ID field configured for storing the unique category identifier corresponding to the RDS entry, and a PEERS field for storing the unique record identifier of each other RDS entry which corresponds to each respective CDS entry associated with the unique category identifier stored in the RECORD\_CATEGORY\_ID field.

15 15. The method of Claim 9 further comprising the steps of:

defining for each CDS entry a unique category identifier;

defining for each CDS entry a field configured for storing the unique category identifier of each other CDS entry with which each respective CDS entry is associated;

defining for each RDS entry a unique record identifier;

defining for each RDS entry a RECORD\_CATEGORY\_ID field configured for storing the unique category identifier corresponding to the RDS entry, and a PEERS field for storing the unique record identifier of each other RDS

entry which corresponds to each respective CDS entry associated with the unique category identifier stored in the RECORD\_CATEGORY\_ID field; and

5 defining for each CDS entry a field configured for storing a STAND-ALONE flag indicating whether a PEER field must be available in a first RDS entry to store the unique record identifier of a second RDS entry before said second RDS entry may be entered into the RDS.

10 16. The method of Claim 9 further comprising defining for each CDS entry a unique category identifier;

defining for each CDS entry a field configured for storing the unique category identifier of each other CDS entry with which each respective CDS entry is associated;

15 defining for each RDS entry a unique record identifier;

defining for each RDS entry a RECORD\_CATEGORY\_ID field configured for storing the unique category identifier corresponding to the RDS entry, and a PEERS field for  
20 storing the unique record identifier of each other RDS entry which corresponds to each respective CDS entry associated with the unique category identifier stored in the RECORD\_CATEGORY\_ID field; and

defining for each CDS entry a field configured for  
25 storing a REUSABLE flag indicating whether a new other RDS entry should be created and referenced in the PEERS field, or an existing other RDS entry may be referenced in the

PEERS field if the value and meaning of the existing other RDS entry is substantively identical to the value of the new other RDS entry that would otherwise have been created.